November 18, 1879.

Prof. W. H. Flower, LL.D., F.R.S., President, in the Chair.

The Secretary read the following reports on the additions made to the Society's Menagerie during the months of June, July, August, and September 1879:—

The total number of registered additions to the Society's Menagerie during the month of June was 192, of which 38 were by birth, 54 by presentation, 78 by purchase, 21 were received on deposit, and 1 by exchange. The total number of departures during the same period by death and removals was 119.

The most noticeable additions during the month of June were as follows:—

1. A Spotted-billed Toucamet (*Selenidera maculirostris*), from Rio, Brazil, purchased June 14.

The receipt of this specimen, which is the first of this Toucan that has reached us, has raised the number of species of the group now represented in our collection to seven, namely:—

1. Toco Toucan, *Ramphastos toco*.
2. Red-billed Toucan, *Ramphastos erythrorhynchus*.
3. Sulphur-and-white-breasted Toucan, *Ramphastos vitellinus*.
4. Cuvier's Toucan, *Ramphastos cuvieri*.
5. Ariel Toucan, *Ramphastos ariel*.
6. Sulphur-breasted Toucan, *Ramphastos carinatus*.
7. Spotted-billed Toucamet, *Selenidera maculirostris*.

2. Two Tuatera Lizards (*Sphenodon punctatus*[1]), purchased June 24th.

These specimens were obtained from the island of "Karewa," a barren scoria rock off the harbour of Tauranga, Bay of Plenty, New Zealand, by Captain Fairchild, of the Government steamer 'Himemoa,' about Dec. 1 to 15, 1878, and were brought to this country by Mr. Josiah Martin, of Auckland, New Zealand.

Sphenodon punctatus appears to be still found in several of the rocky islets in the Bay of Plenty, whereas the second species of Tuatera (*Sphenodon guentheri*, Buller, Trans. N. Z. Inst. ix. p. 324) seems to be confined to the Brothers Islands in Cook's Straits.

The registered additions to the Society's Menagerie during the month of July were 109 in number; of these 45 were acquired by presentation, 35 by purchase, 5 by exchange, 17 by birth, and 7 were received on deposit. The total number of departures during the same period by death and removals was 112.

The most noticeable additions during the month were:—

1. A Funereal or Yellow-eared Cockatoo (*Calyptorhynchus fune-*

---

[1] Dr. Gray, when he showed the identity of *Hatteria* and *Sphenodon* (Ann. N. H. ser. 4, vol. iii. p. 168), made the latter term neuter, and called this animal *Sphenodon punctatum*. But ὀδών is simply an old form of ὀδοὺς, and is properly masculine.

reus), from New South Wales, purchased July 16th, being the first example of this fine Parrot that has reached us alive.

2. A young pair of the Mule Deer of North America (*Cervus macrotis*), obtained through the valuable assistance of Dr. J. D. Caton, C.M.Z.S., and received July 18th. These Deer were the pets of Messrs. H. H. Carter and E. N. Carter, of Wyoming Territory, U. S. A., and were kindly parted with in aid of the Society's efforts to introduce this remarkable species of Deer into Europe.

The total number of registered additions to the Society's Menagerie during the month of August was 137; of these 54 were acquired by presentation, 39 by purchase, 23 by birth, 13 were received on deposit, and 8 in exchange. The total number of departures during the same period by death and removals was 115.

The most noticeable additions during the month were:—

1. A Bush-Dog (*Icticyon venaticus*), from British Guiana, presented by J. E. Tinné, Esq., August 20th.

Mr. Tinné has kindly sent me the following notes upon this peculiar animal, which is quite new to the collection:—

"The Bush-Dog came from Dunoon, on the Hyama Creek, a tributary of the Demerara river, British Guiana. Dunoon is just above the Sand Hills, and is a wood-cutting block of high land, covered with wallaba, green-heart, and mora trees. The mother was shot by our tenant Señor Lopez de Faubra on the creek; and he secured a pair of the puppies for me, of which one unfortunately died in Georgetown before I left the colony last May. I fed them on raw meat. I believe these animals hunt in packs by scent, and are exceedingly savage; they take to the water readily. They are very seldom seen, and never frequent the low coast-lands, where our sugar-estates lie."

2. An Indian Otter (apparently *Lutra nair*), from Rangoon, purchased August 27th.

The total number of registered additions to the Society's Menagerie during the month of September was 93; of these 53 were acquired by presentation, 24 by purchase, 1 by exchange, 2 were bred in the Gardens, and 13 were received on deposit. The total number of departures during the same period by death and removals was 91.

The following extracts from a letter addressed to the Secretary by Mr. Henry O. Forbes, dated "Kosala, Bantam, W. Java, July 27, 1879, were read:—

"The following note as to the distribution of the Badger-headed Mydaus (*Mydaus meliceps*), called by the Sundanese "Sigoeng" (Dutch spelling), may not be without interest.

"Horsfield says that this species 'is confined exclusively to those mountains which have an elevation of more than 7000 feet above the surface of the ocean. There it occurs with the same regularity as many plants. The long extended surface of Java, abounding with isolated volcanoes with conical points which exceed this elevation, affords many places favourable to its resort.'

"My present residence is about 2000 feet above the sea. Many, many times, especially in the evening just after dusk, the Mydaus has discovered its proximity to us by its extremely disagreeable and peculiar odour. So powerful indeed is this that natives attempting to catch these animals, often fall down insensible if struck by the discharge from their anal battery. Even at a distance of half a mile and more the stink, as I must call it, permeates the atmosphere so thickly that it is plainly discernible by the taste. None of the mountains in this neighbourhood rise over 4000 feet. I have found the burrows of the Mydaus at 2400 feet. At Tjipanas (Bantam), at an elevation of 850 feet, it is abundantly to be found—at Djasinga also, which is lower still, as well as at Buitenzorg, 750 feet above sea-level. It has also been found in considerable numbers at lower elevations, between Djasinga and the coast. I am informed, but cannot vouch for its being a fact, that its eastward limit is Cheribon. From this it would appear that the habitat of the Mydaus is now much lower than in the time of Horsfield, if his observation was correct. Sir Charles Lyell[1] thus explains its strange distribution:—'Before the island was peopled by man, by whom their numbers are now thinned, they may occasionally have multiplied, so as to be forced to collect together and migrate, in which case, notwithstand- the slowness of their motions, some few would succeed in reaching another mountain some 20 or even 50 miles distant; for although the climate of the hot intervening plains would be unfavourable to them, they might support it for a time, and would find there abundance of insects, on which they feed.'

"Now that the forests are being more and more cut down one would have expected no downward movement, at least of this peculiar animal, which is as much persecuted as ever. The temperature of Buitenzorg, for instance, is not many degrees lower than that of the plain in which Batavia stands, and is certainly now warmer than it was in past times, when almost impenetrable forests covered the whole district.

"Therefore to find the Mydaus so frequently at so low an elevation is a fact we have thought worth recording, because either it can sustain a greater degree of heat than was supposed by Horsfield, or it has now accommodated itself to a lower elevation."

Mr. Edward R. Alston exhibited, on behalf of Mr. R. G. Wardlaw Ramsay, 67th Regiment, a few specimens of Mammals from Afghanistan and Burmah. Of these one was an example of *Pteromys fimbriatus*, Gray, killed on the Peiwar Kotal in July 1879; this species had hitherto been only known from the Himalayas. Another was a Burmese skin of *Herpestes auropunctatus*, Hodgson an animal which is not included in Blyth's posthumous fauna of that country[1]. On exhibiting a specimen of *Paradoxurus musanga* (Raffles), Mr. Alston observed that the *P. fasciatus* of Gray[2] proved to be a synonym of that well-known species, and had nothing whatever in common with the *Viverra fasciata* of either Gmelin[3] or Desmarest[4]. Mr. Wardlaw Ramsay intended to present these specimens to the British Museum.

---

[1] Principles of Geology, ii. 362 (1872).

Mr. Alston also exhibited one of the typical skulls of *Tapirus dowi* (Gill)[5], which had been intrusted to him by the authorities of the United-States National Museum, and pointed out the osteological characters which distinguish it from *T. bairdi* (Gill)[6]. Mr. Alston hoped to be able to fully describe and figure the skull of *T. dowi* in a future part of Messrs. Godman and Salvin's 'Biologia Centrali-Americana,' but wished now to place on record the fact that the young Tapir from Corinto, which lived in the Society's Gardens under the name of *T. bairdi*[7], was really referable to *T. dowi*, as was also a skull from Volcan Viejo, presented by Mr. Sclater to the British Museum[8]. Mr. Alston further remarked that Dr. Gill had been misinformed as to the young of *T. dowi* not being spotted, but thought it probable that the adult would prove to want the rufous colour on the cheeks which is characteristic of Baird's Tapir. The range of the two species required further investigation; but *T. dowi* might prove to be confined to the Pacific slopes of Guatemala and Nicaragua.

The following extract was read from a letter addressed to the Secretary by Dr. A. B. Meyer, C.M.Z.S.:—

"Concerning the locality of *Cervus alfredi*, I wrote to my friend Mr. Oscar Bruger, who lived five years in Cebu, and who told me a short time ago, on his return to Europe, that he knew the habitat of this Deer; and I received this answer:—

"'An Indian friend of mine in Cebu, who lived formerly for years in Samao and Leyte, visited these islands again, and brought an example of this Deer back from there, and presented it to Mr. Bruger.'"

The Secretary exhibited on behalf of Mr. Rowland Ward a head of a Chamois (*Rupicapra tragus*) with two pairs of horns, the hinder pair being the smaller. The specimen in question had been purchased by Captain Towneley Parker at Nuremberg.

---

[1] Journ. As. Soc. Beng. (n. s.) vol. xliii. pt. 2.

[2] P. Z. S. 1864, p. 536; Cat. Carn. &c. Mamm. Brit. Mus. p. 68.

[3] Linn. Syst. Nat. i. p. 92 (1788, ex Sonnerat).

[4] Nouv. Dict. d'Hist. Nat. vii. p. 169 (1817, descr. orig.).

[5] *Elasmognathus dowii*, Gill, Amer. Journ. Sc. l. p. 142 (1870, descr. orig.).

[6] *Elasmognathus bairdii*, Gill, Proc. Acad. Philad. 1865, p. 183 (descr. orig.).

[7] Sclater, P. Z. S. 1872, p. 635, pl. li.; List Vert. An. Zool. Soc. (1879) p. 115, no. 399 *b*.

[8] *Cf.* P. Z. S. 1867, p. 473.

Prof. Flower exhibited the skull of a Beluga, or White Whale, *Delphinapterus leucas* (Pallas), which has been presented by His Grace the Duke of Sutherland to the Museum of the Royal College of Surgeons, and made the following remarks:—

As this cetacean has been but rarely observed in the British seas, and as there is but one known instance in which a specimen has been taken alive and authenticated by preservation of its remains[1], the circumstances relating to its capture, as described in a letter from the Rev. Dr. Joass, of Golspie, may be worth recording:—

"It was found close to the salmon-nets near the Little Ferry, about three miles to the westward of Dunrobin, Sutherlandshire, at ebb tide, on Monday, June 9th, 1879, caught by the tail between two short posts to which a stay-rope of the stake-net was fastened (see fig. 1); and a Salmon of 18 lb. weight, which was supposed to have been the object of its pursuit, was found in front of it. It measured 12 feet 6 inches in length. The tail was 34 inches across, and the flippers 17 inches long. It was a female, and had 20 teeth in the upper jaw and 16 in the lower. The stomach contained a few flakes of fish, which from size and colour might have been Salmon. It was found, on cleaning the skeleton, that in its efforts to escape the Whale had broken its back between the third and fourth lumbar vertebræ; and it had a recent granulating wound on the frontal pad, extending about five inches transversely, and about three inches broad, the lower edge being on a line between the eyes. I have heard since that two days before its capture it was seen off Cracaig by Brora fishermen who were lying at their lines. At first they thought it a human body; as it approached *against the ebb*, they took it for a ghost! At still closer quarters they saw that it was a living beast of some kind bearing down upon them, and plied it with stones (their spare sinkers), hoping that it would turn aside and not oblige them to leave their ground; but it hardly heeded them, and so they

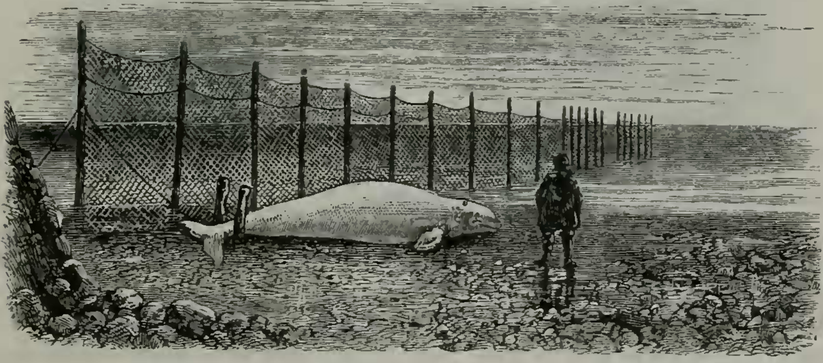

Fig. 1. The mode in which the Beluga was caught. From a sketch by the Rev. Dr. Joass.

---

[1] Bell's British Quadrupeds, 2nd edit. p.440.

dropped their lines and sheared off. It went below near Collieburn, but was up again at Kintradwell, and still heading westward against the tide."

The skeleton is that of a perfectly adult animal, all the epiphyses of the vertebræ being united to the bodies. The spine of one lumbar vertebra has been recently broken off close to the base, probably the injury referred to in Dr. Joass's letter.

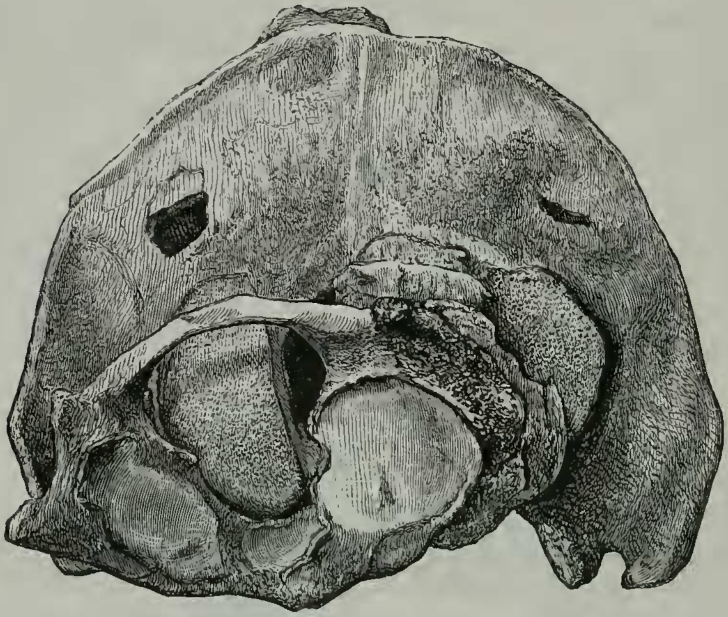

Fig. 2. Posterior surface of skull of Beluga, with dislocated atlas. One-third the size of nature.

On examining the skull a most remarkable evidence of old injury and subsequent recovery showed itself. The atlas has been dislocated off the occipital condyles to the left side and tilted a little obliquely, so that the right transverse process is somewhat higher than the left. The dislocation has been complete, the whole of the surfaces formerly in apposition being now free from each other. The prominent inner edge of the left articular surface has passed beyond the outer edge of the condyle and lodged in the hollow which bounds it externally, and so has been prevented by the contraction of the cervical muscles from returning into its place. In this position the bones have become firmly fixed by deposit of new osseous matter around the right side of the joint, and partially covering the exposed right condyle. The aperture for the passage of the spinal cord is narrowed to a chink scarcely three quarters of an inch in greatest transverse diameter. The articular surfaces, as far as they can be seen, have preserved their normal form, and are only slightly rougher than is natural, which clearly shows that the dislocation was traumatic, and not occasioned by disease of the joint. Indeed there is no evidence of any previous disease in this or any other part of the vertebral column. The formation of new bone, resulting in ankylosis, is what might naturally be expected to occur as the consequence of such an injury, and is the usual sequence of dislocation of the atlas, when not immediately fatal, in the human subject.

In the present case it is difficult to imagine how such an accident can have been occasioned, as in the case of an aquatic animal there is no possibility of a fall on the head, the common cause of such dislocations. Even a violent collision of the head against a rock or ship can scarcely have produced such displacement, in the case of an animal floating freely in the water, unless there were some counterpressure causing resistance on the part of the trunk. The animal certainly had received a blow on the fore part of the head, as at about three inches from the apex of the rostrum, on the right side, there is a roughened surface on which new bone has been thrown out, very probably at the same date as that at the occiput, and long antecedent to the recent wound observed at the time of its capture.

However the injury may have been brought about, the specimen affords a remarkable illustration of recuperative power, as the laceration of all the parts around the articulation, and effusion of blood from the plexus surrounding the cord, must have been considerable, and the ability to pursue and capture living prey must have been, for a time at least, greatly interfered with. The spinal cord itself being of comparatively small diameter in proportion to the size of the aperture through which it passes, seems to have escaped serious injury, and to have accommodated itself to the abnormal position of the surrounding bones. After recovery the head was fixed in a very abnormal position with regard to the body, which may account for the wandering of the animal so far from its natural habitat, and for the facility of its capture.

The following papers were read:—